

Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) Cooling panel for a shaft furnace, comprising at least one vertical duct which runs through the cooling panel, the ends of the at least one duct are connected to connection ends running transversely with respect to the plane of the cooling panel, wherein each duct and the connection ends are formed from a continuous tube made from ~~a material selected from the group consisting of low carbon steel, stainless steel and an alloy~~ which predominantly comprises Cu and Ni with an Ni content of $\geq 28\%$ by weight, and the remainder of the cooling panel consists of copper which is cast around this tube, the cooling panel being provided, on a side remote from the connection ends, with a multiplicity of horizontal ribs.
2. (Currently Amended) Cooling panel according to Claim 1, wherein the ~~material~~ alloy of the continuous tube contains between 65 and 70% by weight Ni, approx. 3% Fe and $\leq 1\%$ of one or more of the elements Mn, Si and C.
3. (Currently Amended) Cooling panel according to Claim 2, wherein the ~~material~~ alloy of the continuous tube consists of Monel, with a composition of approx. 28% Cu, 68% Ni, 3% Fe, 1% Mn and low Si and/or C contents.
4. (Previously Presented) Cooling panel according to Claim 1, wherein the ribs have a length, in the width direction of the cooling panel, which is smaller than the width of the cooling panel.

5. (Previously Presented) Cooling panel according to Claim 4, wherein the ribs have a length in the width direction of the cooling panel of $\leq 50\%$ of the width of the panel.
6. (Previously Presented) Cooling panel according to Claim 1, wherein the ribs are provided with supporting backs.
7. (Previously Presented) Cooling panel according to Claim 6, wherein each of the ribs with a supporting back is T-shaped in cross section, parallel to the plane of the cooling panel.
8. (Previously Presented) Cooling panel according to Claim 6, wherein each of the ribs with supporting backs are in the shape of a + in cross section, parallel to the plane of the cooling panel.
9. (Previously Presented) Cooling panel according to Claim 6, wherein the ribs are provided with supporting backs on either side in the vicinity of their ends.
10. (Currently Amended) Cooling panel according to Claim 1, wherein ~~the~~ a wall is provided, on the side of the connection ends, on either side of each duct, with undulating recesses in which reinforcing walls which fill up these recesses are distributed over the height of the cooling panel.

11. (Currently Amended) Cooling panel according to Claim 1, wherein ~~the~~ a wall, on the side remote from the connection ends, is provided, on either side of each duct, with undulating recesses.

12. (Previously Presented) Cooling panel according to Claim 1, wherein the ribs thicken towards their free ends remote from the main body of the cooling panel.

13. (Currently Amended) Shaft furnace provided with a jacket which on the inside is at least partially provided with cooling panels according to Claim 1.

14. (Previously Presented) Process for producing a cooling panel according to Claim 2, wherein the continuous tube (or tubes) is firstly given its final shape, after which the copper for the cooling-panel body to be formed is cast as cast material around the tube at a temperature which is so close to the melting point of material of the tube that, after the cast material has cooled, the cast material is attached to the material of the tube.

15. (Currently Amended) Cooling panel according to Claim 2, wherein the ~~material~~ alloy of the continuous tube consists of Monel.

16. (Previously Presented) Cooling panel according to Claim 4, wherein the ribs have a length in the width direction of the cooling panel of $\leq 25\%$ of the width of the panel.

17. (New) Cooling panel according to Claim 16, wherein the multiplicity of horizontal ribs comprises ribs arranged as a plurality of horizontal rows and vertical columns, wherein each row comprises a plurality of ribs and the ribs of a first said row are laterally offset relative to the ribs of a second said row adjacent to said first row, each said column comprises said ribs from alternating rows.

18. (New) Cooling panel according to Claim 16, wherein each of the ribs has an end distal to the surface of the cooling panel and each of the ribs tapers towards the distal end.

19. (New) Cooling panel according to Claim 6, wherein the multiplicity of horizontal ribs comprises ribs arranged as a plurality of horizontal rows and vertical columns, wherein each row comprises a plurality of ribs and the ribs of a first said row are laterally offset relative to the ribs of a second said row adjacent to said first row, each said column comprises said ribs from alternating rows.

20. (New) Cooling panel according to Claim 6, wherein each of the ribs has an end distal to the surface of the cooling panel, the rib comprising an upper portion of the rib having a trapezoidal horizontal cross-section and the support back extending from a lower surface of the upper portion and supporting the upper portion, both the trapezoidal horizontal cross-section and the support back taper towards the distal end.